

AMENDMENTS TO THE CLAIMS

1. (Currently Amended) A method for operation of a flat surface loudspeaker, in which at least one oscillating coil is mounted on a surface in the form of a plate having predetermined material characteristics, comprising:

~~emitting sound by stimulating~~ at least one coil ~~stimulated~~ to oscillate electrically by a sound source;

emitting sound by the surface stimulated to oscillate mechanically by the oscillating coil; in a measuring mode,

measuring the acoustic frequency response of this flat surface loudspeaker;

determining a frequency curve based on the measured acoustic frequency response;

determining an inverse frequency curve to the frequency curve;

simulating the inverse frequency curve in a filter device as a transfer function of the filter device; and

in an operating mode, compensating for the frequency response of the flat surface loudspeaker by the filter device, which is connected between the sound source and the flat surface loudspeaker ~~in an operating state~~, based upon the transfer function.

2. (Previously Presented) The method as claimed in claim 1, wherein the transfer function of the filter device is simulated by digital filters.

3. (Previously Presented) The method as claimed in claim 2, wherein the transfer function is formed by FIR (Finite Impulse Response) filters, whose filter coefficients are derived from the inverse frequency curve.

4. (Currently Amended) A flat surface loudspeaker comprising:

at least one oscillating coil, mounted on a surface in the form of a plate having predetermined material characteristics which, when stimulated by electrical sound signals, causes this surface to oscillate in order to emit sound; and

a filter device for the sound signals, connected upstream of the at least one oscillating coil, wherein a transfer function of the filter device is the inverse of a frequency response of the flat surface loudspeaker.
5. (Previously Presented) The flat surface loudspeaker as claimed in claim 4, wherein the filter device is in the form of a digital filter.
6. (Previously Presented) The flat surface loudspeaker as claimed in claim 5, wherein the filter device is formed by FIR (Finite Impulse Response) filters.
7. (Previously Presented) The flat surface loudspeaker as claimed in claim 5, wherein the filter device includes a sample and hold element as the input element, connected via an analogue-to-digital converter to the digital filter, whose output is connected to a digital-to-analogue converter.
8. (Previously Presented) The flat surface loudspeaker as claimed in claim 5, wherein the filter device is equipped with a digital signal processor.
9. (Previously Presented) The flat surface loudspeaker as claimed in claim 6, wherein the filter device includes a sample and hold element as the input element, connected via an analogue-to-digital converter to the digital filter, whose output is connected to a digital-to-analogue converter.

10. (Previously Presented) The flat surface loudspeaker as claimed in claim 6, wherein the filter device is equipped with a digital signal processor.

11. (Previously Presented) The flat surface loudspeaker as claimed in claim 7, wherein the filter device is equipped with a digital signal processor.

12. (Previously Presented) The flat surface loudspeaker as claimed in claim 9, wherein the filter device is equipped with a digital signal processor.

13-16. (Cancelled)